

The Plant Analysis Report

The plant analysis report has three sections: laboratory results, interpretation and recommendations. Results include concentrations of 11+ essential plant nutrients and sodium, on a dry-weight basis. Ratios of important elements, including N:K, N:S and Fe:Mn, are also provided. The nitrate nitrogen concentration of petioles is reported for cotton, strawberry and vinifera grape.

Interpretation is based on sufficiency ranges established for each crop. Nutrient concentrations are converted to a standard index scale of 0–124. The scale is divided into zones that indicate whether nutrient levels are deficient, low, sufficient, high or in excess. An index value of 50–75 is desirable, in most cases.

When appropriate, the report contains fertilizer recommendations and supporting information. Diagnostic reports may also provide site-specific suggestions for corrective action. The inclusion of these suggestions will depend on how completely the grower filled out the sample information form.

Record Keeping

Plant analysis reports provide valuable data for making fertilizer management decisions as well as an excellent record of crop nutrient use and needs from year to year under different environmental conditions. Combined with yield data, they can also document nutrient use on fields where animal or municipal waste is land-applied. In this way, plant analysis reports can serve as valuable evidence of responsible crop management and environmental stewardship.

For additional information, contact

NCDA&CS Agronomic Division
Colleen M. Hudak-Wise, Ph.D., Director

Plant/Waste/Solution Section
Brenda R. Cleveland, Section Chief

Physical Location:
4300 Reedy Creek Road
Raleigh, NC 27607-6465

Mailing Address:
1040 Mail Service Center
Raleigh, NC 27699-1040

Phone: (919) 733-2655

or visit our Web site
www.ncagr.gov/agronomi

Prepared by
Brenda Cleveland, Michelle McGinnis
and Catherine Stokes

revised September 2008

Agronomic Division

Plant Tissue Analysis



*Measuring Nutrients to
Optimize Fertilizer Efficiency
& Protect Environmental Quality*

N.C. Department of Agriculture
and Consumer Services

Steve Troxler, Commissioner